

BRIEFING GUIDE



U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

Table of Contents

Paragraph Number	Title	Page
1-1-9	CONSTRAINTS GOVERNING SUPPLEMENTS AND PROCEDURAL DEVIATIONS	3
2-3-7	AIRCRAFT EQUIPMENT SUFFIX	3
3-9-4	TAKEOFF POSITION HOLD	4
3-10-6	ANTICIPATING SEPARATION	5
4-5-1	VERTICAL SEPARATION MINIMA	6
4-5-2	FLIGHT DIRECTION	6
8-4-1	APPLICATION	7
8-8-3	LONGITUDINAL SEPARATION	8
8-9-9	PROCEDURES FOR WEATHER DEVIATIONS AND OTHER CONTINGENCIES IN OCEANIC CONTROLLED AIRSPACE	9

- 1. PARAGRAPH NUMBER AND TITLE: 1-1-9. CONSTRAINTS GOVERNING SUPPLEMENTS AND PROCEDURAL DEVIATIONS
- 2. BACKGROUND: This change updates the address for the U.S. Navy office responsible for interface with the FAA.
- 3. CHANGE:

OLD

1-1-9. CONSTRAINTS GOVERNING SUPPLEMENTS AND PROCEDURAL DEVIATIONS

NEW

1-1-9. CONSTRAINTS GOVERNING SUPPLEMENTS AND PROCEDURAL DEVIATIONS

Military Operations Interface Offices

Address	
CNO (OP-554)	

Military Operations Interface Offices

Branch	Address
U.S. Navy	CNO Office of the Chief of Naval Operations (N885F) 2000 The Pentagon Washington, D.C. 20350-2000

TBL 1-1-3

4. OPERATIONAL IMPACT: None.

1. PARAGRAPH NUMBER AND TITLE: 2-3-7. AIRCRAFT EQUIPMENT SUFFIX

TBL 1-1-3

2. BACKGROUND: On February 24, 2000, the FAA implemented the use of Reduced Vertical Separation Minima (RVSM) in the Pacific Oceanic area. This airspace is currently designated as Required Navigation Performance-10 (RNP-10) airspace, a reduced lateral separation minima based on navigational performance. The equipment suffix for RVSM is /W, and the equipment suffix for RNP is /R. Our current computer processors are only capable of displaying one equipment suffix. With the introduction of RVSM in the Pacific region, controllers will need to be aware of both /R and /W suffix qualifiers. To indicate to the controller that an aircraft is qualified for both RVSM and RNP, a new equipment suffix identifier, /Q, is being added. It is important to note that airlines will not be filing /Q. This is an identifier internal to the FAA's flight plan data processing systems. When our computer processors receive a flight plan indicating both /R and /W equipment suffixes, the computer will automatically convert this combination to a single, displayable equipment suffix identifier, /Q.

7110.65M CHG 1 8/10/00

3. CHANGE:

OLD 2-3-7. AIRCRAFT EQUIPMENT SUFFIX

NEW 2-3-7. AIRCRAFT EQUIPMENT SUFFIX

of /R+/W to =/Q.

Aircraft Equipment Suffixes

SUFFIX AIRCRAFT EQUIPMENT SUFFIXES

Add Add

Aircraft Equipment Suffixes

SUFFIX AIRCRAFT EQUIPMENT SUFFIXES

AIRCRAFT EQUIPMENT SUFFIXES

Required Navigation Performance (RNP) and Reduced Vertical Separation Minima (RVSM) (Indicates approval for application of RNP and RVSM separation standards.) It should be noted that/Q is for automation purposes only and will not be filed by system users. FAA

processors will convert the combination

TBL 2-3-3

TBL 2-3-3

4. OPERATIONAL IMPACT: With the implementation of the suffix identifier /Q, the Microprocessor En Route Automated Radar Tracking System (MEARTS) will be capable of displaying site selected color in the full data block to support the controllers with a visual cue in determining which aircraft are authorized for RVSM/RNP separation standards. The conflict probe function for the Oceanic Display and Planning System (ODAPS) will recognize /Q and probe for any traffic conflictions utilizing these reduced separation standards. All personnel involved with the processing and interpretation of flight plan data must be cognizant of the fact that /Q is an internal FAA equipment identifier and that air carriers will not file a /Q in the equipment suffix portion of their flight plans.

1. PARAGRAPH NUMBER AND TITLE: 3-9-4. TAKEOFF POSITION HOLD

2. BACKGROUND: An Air Traffic TIPH workgroup convened to review procedures relating to TIPH. The group clarified the existing procedures in the handbook. These changes were incorporated in FAA Notice N7110.210.

3. CHANGE:

OLD

3-9-4. TAKEOFF POSITION HOLD

a. Authorize an aircraft to taxi into position and hold, except as restricted in subpara e, when takeoff clearance cannot be issued because of traffic. Issue traffic information to any aircraft so authorized. Traffic information may be omitted when the traffic is another aircraft which has landed on or is taking off the same runway and is clearly visible to the holding aircraft. Do not use conditional phrases such as "behind landing traffic" or "after the departing aircraft."

NEW

3-9-4. TAXI INTO POSITION AND HOLD (TIPH)

a. The intent of TIPH is to position aircraft for an imminent departure. Authorize an aircraft to taxi into position and hold, except as restricted in subpara e, when takeoff clearance cannot be issued because of traffic. Issue traffic information to any aircraft so authorized. Traffic information may be omitted when the traffic is another aircraft which has landed on or is taking off the same runway and is clearly visible to the holding aircraft. Do not use conditional phrases such as "behind landing traffic" or "after the departing aircraft."

4. OPERATIONAL IMPACT: Minimal.

7110.65M CHG 1

1. PARAGRAPH NUMBER AND TITLE: 3-10-6. ANTICIPATING SEPARATION

2. BACKGROUND: An Air Traffic TIPH workgroup convened to review procedures relating to TIPH. The group clarified the existing procedures in the handbook. These changes from FAA Notice N7110.210 are being incorporated into Order 7110.65.

3. CHANGE:

OLD

3-10-6. ANTICIPATING SEPARATION

Landing clearance to a succeeding aircraft in a landing sequence need not be withheld if you observe the positions of the aircraft and determine that prescribed runway separation will exist when the aircraft cross the landing threshold. Issue traffic information to the succeeding aircraft if not previously reported.

EXAMPLE-

"Delta Forty-Two cleared to land. Traffic is U.S. Air MD-Eighty over approach lights."

Add

REFERENCE-

FAAO 7110.65, Closed/Unsafe Runway Information, Para 3-3-2.

Add

<u>NEW</u>

3-10-6. ANTICIPATING SEPARATION

Landing clearance to succeeding aircraft in a landing sequence need not be withheld if you observe the positions of the aircraft and determine that prescribed runway separation will exist when the aircraft cross the landing threshold. Issue traffic information to the succeeding aircraft if not previously reported and appropriate traffic holding in position or departing prior to their arrival.

EXAMPLE-

"American Two Forty-Five cleared to land, number two following United Boeing Seven-Thirty-Seven two mile final, traffic will depart prior to your arrival,"

"American Two Forty-Five cleared to land, number two following United Boeing Seven-Thirty-Seven two mile final, traffic will be an MD 88 holding in position."

No Change

FAAO 7110.65, Landing Clearance, Para 3-10-5b, not required if utilizing the provisions of Para 3-10-6.

4. OPERATIONAL IMPACT: Minimal.

1. PARAGRAPH NUMBER AND TITLE: 4-5-1. VERTICAL SEPARATION MINIMA

2. BACKGROUND: On February 24, 2000, Reduced Vertical Separation Minimum (1,000 ft. vertical) was applied in the Pacific Region. This implementation requires that FAAO 7110.65, paragraph 4-5-1, be amended to reflect the application of RVSM within the Anchorage FIR. Because of Anchorage ARTCC's unique airspace configuration and traffic flow, RVSM will be applied within transition airspace between RVSM approved aircraft.

3. CHANGE:

Title thru 2.

OLD

4-5-1. VERTICAL SEPARATION MINIMA

4-5-1. VERTICAL SEPARATION MINIMA

NEW

No Change

No Change

No Change

3. Apply 1,000 feet between approved aircraft if:

(a) Operating within airspace and altitude(s) designated for reduced vertical separation minimum (RVSM) or,

(b) Operating within RVSM transition airspace and designated altitude(s) if en route to/from RVSM airspace and designated altitude(s) if: designated airspace.

(b) Operating within RVSM transition

Add

1. En route to/from RVSM designated

airspace; or,

Add

2. Within the Anchorage FIR.

4. OPERATIONAL IMPACT: None.

1. PARAGRAPH NUMBER AND TITLE: 4-5-2. FLIGHT DIRECTION

2. BACKGROUND: Reduced Vertical Separation Minimum (1,000 ft. vertical) is currently utilized within the North Atlantic Minimum Navigation Performance Specification Airspace and was applied in the Pacific Region in February 2000. According to ICAO Annex 2 (Rules of the Air), Appendix 3, cardinal altitudes may be assigned in areas where RVSM may be used. This FAAO 7110.65 change allows the assignment of any cardinal altitude to aircraft within RVSM or RVSM transition airspace.

3. CHANGE:

OLD

Altitude Assignment

NEW

4-5-2. FLIGHT DIRECTION

4-5-2. FLIGHT DIRECTION

Aircraft Operating	On course degrees magnetic	Assign	Examples
Approved	Any course	Any	FL 330,
aircraft within	,	designated	FL 340,
RVSM or	Į	cardinal	FL 350,
RVSM	1	altitude	FL 360
transition			
airspace			

TBL 4-5-1

Altitude Assignment			
Aircraft Operating	On course degrees magnetic	Assign	Examples
Aircraft within RVSM or RVSM transition airspace	Any course	Any designated cardinal altitude	FL 330, FL 340, FL 350, FL 360

TBL 4-5-1

4. OPERATIONAL IMPACT: None.

1. PARAGRAPH NUMBER AND TITLE: 8-4-1, APPLICATION

2. BACKGROUND: Currently, a lack of ground-based navigational aids hampers low altitude operations in the Gulf of Mexico, especially those related to the offshore oil industry. The Grid System is a series of GPS waypoints that allows controllers and pilots to more accurately track and report aircraft positional data. This in turn allows for enhancements in safety and efficiency for the users. Because FAA's Flight Standards Organization has determined that, under certain conditions, GPS is the equivalent of a domestic NAVAID signal, it has been determined that a protected airspace/separation standard of 6 miles either side of centerline would be appropriate for aircraft operating on flight paths defined by the use of Grid System waypoints.

3. CHANGE:

OLD

8-4-1. APPLICATION

Separate aircraft by assigning different flight paths whose widths or protected airspace do not overlap.

Add

NOTE-

Add

Lateral separation minima is contained in:
Section 7, North Atlantic ICAO Region.
Section 8, Caribbean ICAO Region.
Section 9, Pacific ICAO Region.
Section 10, North American ICAO RegionArctic CTA.

NEW

8-4-1. APPLICATION

No Change

Within that portion of the Gulf of Mexico Low Offshore airspace controlled by Houston ARTCC, use 12 NM between aircraft whose flight paths are defined by published Grid System waypoints.

NOTE-

- 1. The Grid System is defined as those waypoints contained within the Gulf of Mexico Low Offshore airspace and published on the IFR Vertical Flight Reference Chart.
- 2. Lateral separation minima is contained in:
 Section 7, North Atlantic ICAO Region.
 Section 8, Caribbean ICAO Region.
 Section 9, Pacific ICAO Region.
 Section 10, North American ICAO RegionArctic CTA.
- **4. OPERATIONAL IMPACT:** This change will allow controllers to more accurately track the position of aircraft operating in low altitude offshore airspace. This will allow for more efficient use of airspace while enhancing IFR operations in the Gulf.

1. PARAGRAPH NUMBER AND TITLE: 8-8-3. LONGITUDINAL SEPARATION

2. BACKGROUND: Currently there are several different standards of longitudinal separation being applied within different areas of FAA controlled Oceanic and Offshore airspace that have essentially the same level of CNS capability. Recently ICAO has joined in the effort to standardize these differences. Currently the standard applied to traffic within most areas of the Gulf of Mexico is 15 minutes, as opposed to 10 minutes in most other Offshore and Oceanic areas controlled by FAA. To take full advantage of recent upgrades in CNS, this change will allow the use of 10 minutes longitudinal separation by applying Mach Technique. Mexico has also agreed to utilize a wider range of longitudinal separation, based on Mach Technique. This will result in a significant increase in system capacity.

3. CHANGE:

OLD

8-8-3, LONGITUDINAL SEPARATION

Title thru c3

- **d.** Operations between aircraft not covered in subparas b or c (subsonic flight):
 - 1. Operations at or above FL 200.
- (a) 15 minutes, between turbojet aircraft, provided the Mach number technique is applied, in accordance with para 8-3-3, Mach Number Technique.
- (b) Between turbojet aircraft, provided the Mach number technique is applied in accordance with para 8-3-3, Mach Number Technique, and *only* when it is possible to ensure by radar or other approved means that the required time interval exists and will exist at the common point:
- (1) 10 minutes when the preceding aircraft is at least Mach 0.03 greater than the following aircraft; and
- (2) 5 minutes when the preceding aircraft is at least Mach 0.06 greater than the following aircraft:

Add		
Add		

NEW

8-8-3. LONGITUDINAL SEPARATION

No Change

No Change

No Change

- (a) 10 minutes, between turbojet aircraft, provided the Mach number technique is applied, in accordance with para 8-3-3, Mach Number Technique.
- (b) Between turbojet aircraft, provided the Mach number technique is applied in accordance with para 8-3-3, Mach Number Technique, and only when it is possible to ensure by radar or other approved means that the required time interval exists and will exist at the common point, and the preceding aircraft is maintaining a greater Mach number than the following aircraft in accordance with the following:

Delete

Delete

- (1) 9 minutes, if the preceding aircraft is Mach 0.02 faster than the following aircraft;
- (2) 8 minutes, if the preceding aircraft is Mach 0.03 faster than the following aircraft;
- (3) 7 minutes, if the preceding aircraft is Mach 0.04 faster than the following aircraft:
- (4) 6 minutes, if the preceding aircraft is Mach 0.05 faster than the following aircraft:
- (5) 5 minutes, if the preceding aircraft is Mach 0.06 faster than the following aircraft.
 - (c) <u>Between all other turbojet aircraft:</u>
 15 minutes.

4. OPERATIONAL IMPACT: None.

8/10/00 7110.65M CHG 1

 PARAGRAPH NUMBER AND TITLE: 8-9-9. PROCEDURES FOR WEATHER DEVIATIONS AND OTHER CONTINGENCIES IN OCEANIC CONTROLLED AIRSPACE

2. BACKGROUND: Currently, paragraph 8-9-9 specifies contingency altitudes which do not take into account areas where Reduced Vertical Separation Minimum (RVSM), 1,000 ft. vertical, may be applied above flight level 290, RVSM was utilized in the Pacific ICAO region on February 24, 2000. Additionally, paragraph 8-9-9 does not currently state explicitly that controllers are not responsible for providing separation between aircraft during application of the specified weather deviation procedure.

3. CHANGE:

OLD

ATIONS AND OTHER CONTINGENCIES IN ATIONS AND OTHER CONTINGENCIES IN OCEANIC CONTROLLED AIRSPACE

Aircraft must request an ATC clearance to deviate. Since aircraft will not fly into known areas of weather, weather deviation requests should take priority over routine requests. If there is conflicting traffic and ATC is unable to establish standard separation, ATC shall:

a. Advise the pilot that standard separation cannot be applied;

b. If possible, suggest a course of action; and

NOTE-

ATC may suggest that the pilot climb or descend to a 1. ATC may suggest that the pilot climb or descend to contingency altitude (1,000 feet above or below that assigned if operating above FL 290; 500 feet above or below that assigned if operating at or below FL 290).

Add

c. To the extent practical, provide traffic information for all affected aircraft.

PHRASEOLOGY-

TRAFFIC (position and altitude); REPORT DEVIATION COMPLETE. DEVIATION COMPLETE.

4. OPERATIONAL IMPACT: None.

NEW

8-9-9. PROCEDURES FOR WEATHER DEVI- 8-9-9. PROCEDURES FOR WEATHER DEVI-OCEANIC CONTROLLED AIRSPACE

No Change

No Change

No Change

NOTE-

- a contingency altitude (1,000 feet above or below that assigned if operating in an area of 2,000 feet standard vertical separation; 500 feet above or below that assigned if operating in an area of 1,000 feet standard vertical or composite separation).
- 2. Once the deviating aircraft has begun a maneuver without an ATC clearance in response to weather or other contingency, the controller is not responsible for providing standard separation between the aircraft that is deviating and any other aircraft or airspace. Responsibility for providing standard separation resumes when the deviating aircraft has advised ATC that it has returned to its original or a revised ATC cleared level and track.

No Change

PHRASEOLOGY-

STANDARD SEPARATION NOT AVAILABLE, STANDARD SEPARATION NOT AVAILABLE; DEVIATE AT PILOT'S DISCRETION; SUGGEST SUGGEST CLIMB (or descent) TO (appropriate CLIMB (or descent) TO (appropriate altitude); altitude); TRAFFIC (position and altitude); REPORT